

Euonymus occidentalis Nutt. ex Torr.

burning bush, western wahoo
Celastraceae (Staff-tree Family)

Status: State Threatened

Rank: G5S1

General Description: Adapted from Hitchcock et al. (1961): A straggling shrub 7 to 16 ft (2 to 5 m) tall with non-hairy branches that have narrow, parallel, longitudinal lines, grooves, or streaks. The leaves are thin, oblong-lanceolate, serrate, acuminate, and 2 to 4 in. (5 to 10 cm) long. The stipules are minute or lacking. The flowers are in slender-peduncled, axillary, mostly 3-flowered cymes. The sepals are rounded. The petals are about ¼ in. (5 mm) long and greenish-and purplish-mottled to purplish-red. The anthers are transversely dehiscent and much longer than the filaments. The capsules are 3-lobed. A reddish-orange exterior coat covers the seeds.

Identification Tips: *Euonymus occidentalis* is the only species of the genus *Euonymus* in the Pacific Northwest. The genus *Euonymus* is most closely related to the genus *Pachistima*. *Pachistima* and *Euonymus* have opposite, serrate leaves, clawless, reddish petals, and spineless branches. However, *Pachistima* has persistent leaves that are ½ to 1¼ in. (1 to 3 cm) long and 4-merous flowers, whereas *Euonymus* has deciduous leaves over 1¼ in. (3 cm) long and most commonly has 5-merous flowers.

Phenology: Flowers from May to June.

Range: Western wahoo is found from Thurston County, Washington, to central California. In Washington, this species is found in Thurston, Lewis, Clark, and Cowlitz counties.

Habitat: This species grows in woods on the west side of the Cascade Mountains. It is often found in shaded, moist draws and ravines. In the Puget Trough area it associated with remnant oak savannah. Common associates include Oregon white oak (*Quercus garryana*), Douglas-fir (*Pseudotsuga menziesii*), cascara (*Rhamnus purshiana*), snowberry (*Symphoricarpos albus*), Pacific blackberry (*Rubus ursinus*), Oregon grape (*Berberis aquilinum*), service berry (*Amelanchier alnifolia*), Indian plum (*Oemleria cerasiformis*), wood rose (*Rosa gymnocarpa*), beaked hazelnut (*Corylus cornuta*), nootka rose (*Rosa nutkana*), cleavers (*Galium aparine*), sweet-cicely (*Osmorhiza chilensis*), western trillium (*Trillium ovatum*), stream violet (*Viola glabella*), bleeding heart (*Dicentra formosa*), sweet cherry (*Prunus*

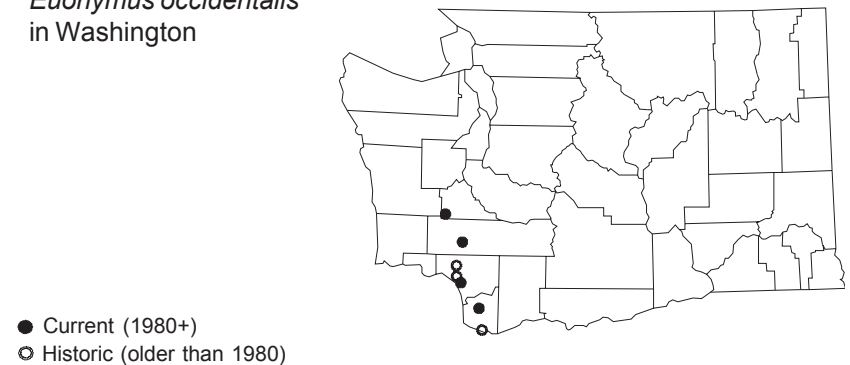
Euonymus occidentalis

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Known distribution of
Euonymus occidentalis
in Washington



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burning bush, western wahoo



Photo by Chris Chappell



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2003 Produced as part of a cooperative project between the Washington Department of Natural Resources, Washington Natural Heritage Program and the U.S.D.I. Bureau of Land Management. Persons needing this information in an alternative format, call (360) 902-1600 or TTY (360) 902-1125.

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avium), beach strawberry (*Fragaria vesca*), American vetch (*Vicia americana*), Kentucky bluegrass (*Poa pratensis*), creeping snowberry (*Symphoricarpos mollis*), starry Solomon's seal (*Smilacina stellata*), western hemlock (*Tsuga heterophylla*), sword fern (*Polystichum munitum*), western red cedar (*Thuja plicata*), sitka spruce (*Picea sitchensis*), and salal (*Gaultheria shallon*).

Ecology: This species prefers moist, wooded/forested areas and is sometimes found in grassy areas with some trees. In Washington, this species is often found on fine sandy loam, silty loam, and silty clay loam soils.

State Status Comments: Known from four recent occurrences and three historic occurrences in Thurston, Lewis, Clark, and Cowlitz counties. The documentation of this species' distribution in Washington is limited and needs more current information.

Inventory Needs: Additional inventory and information on the distribution of *E. occidentalis* is needed. Thurston, Lewis, Clark, and Cowlitz counties should be systematically surveyed for additional populations. Known occurrences should be re-visited.

Threats and Management Concerns: Potential threats include timber harvest and agricultural, commercial, or residential development.

References:

Hitchcock, C.L., A. Cronquist, M. Ownbey, J.W. Thompson. 1961. *Vascular Plants of the Pacific Northwest, Part 3: Saxifragaceae to Ericaceae*. University of Washington Press, Seattle, WA. 614 pp.

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